

PCT

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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|---|---|--|
| Applicant's or agent's file reference<br>2002P18350WO   | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International application No.<br>PCT/EP 03/12472  | International filing date (day/month/year)<br>07.11.2003  | Priority date (day/month/year)<br>07.11.2002 |
| International Patent Classification (IPC) or both national classification and IPC<br>H04Q7/38 |   |  |
| Applicant<br>SIEMENS AKTIENGESELLSCHAFT et al.  |   |  |

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
  - ☒ Basis of the opinion
  - ☐ Priority
  - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☐ Lack of unity of invention
  - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Certain documents cited
  - ☐ Certain defects in the international application
  - ☐ Certain observations on the international application

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|--|--|
| Date of submission of the demand<br><br>07.07.2004   | Date of completion of this report<br><br>27.01.2005  |
| Name and mailing address of the international preliminary examining authority:<br><br> European Patent Office - Gitschiner Str. 103<br>D-10958 Berlin<br>Tel. +49 30 25901 - 0<br>Fax: +49 30 25901 - 840 | Authorized Officer<br><br>Alonso Maleta, J<br><br>Telephone No. +49 30 25901-487  |

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/12472**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-14 as originally filed

**Claims, Numbers**

1-16 as originally filed

**Drawings, Sheets**

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

|                               |             |      |
|-------------------------------|-------------|------|
| Novelty (N)                   | Yes: Claims | 1-16 |
|                               | No: Claims  |      |
| Inventive step (IS)           | Yes: Claims | 1-16 |
|                               | No: Claims  |      |
| Industrial applicability (IA) | Yes: Claims | 1-16 |
|                               | No: Claims  |      |

2. Citations and explanations

**see separate sheet**

**Re Item V**

1. The following document (D1) is referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: WO 00/13426 A (SAMSUNG ELECTRONICS CO LTD) 9 March 2000 (2000-03-09)

2. The application does not meet the requirements of Article 6 PCT, because independent claims 1, 13, 15 and 16 are not clear.
- 2.1 Although claims 1 and 13 have been drafted as separate independent claims, claim 13 contains all the features of claim 1 with the additional feature that time variable information, signalled in downlink channels by a base station of the radio communication system, is used to determine the delay time.

Therefore, as claim 13 contains all the features of independent claim 1 it has been considered as dependant on claim 1 and it should be redrafted accordingly.

The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

- 2.2 The term "delay time" used in claims 1, 13, 15 and 16 is vague and unclear because it leaves the reader in doubt as to the moment or action from which this delay is determined.

According to the description (see page 3, lines 22-27) the problem to be solved is to prevent the occurrence of signalling overload in contention based access channels when a great number of user equipments are paged simultaneously.

In order to evaluate the requirements of Article 33 PCT, it has been assumed that it refers to the time upon receipt of a page request from a base station (see page 5, line 25-page 6, line 12 of the description) or that the user equipment determines a delay time for transmitting a signal on a random access channel (see page 5, line 28-32 of the description).

3. Document D1 (WO0013426), which is considered to represent the most relevant state of the art, discloses a method for controlling uplink access transmissions in a radio communication system wherein the user equipment determines a delay time for

transmitting a signal on an uplink access channel.

The problem to be solved by the present invention may therefore be regarded as a signalling overload in contention based access channels when a great number of user equipments are paged simultaneously.

The method of claim 1 solves this problem by determining a delay time for transmitting a signal on the uplink random access channel based upon a probability distribution that increases in density with increasing delay while in document D1, the delay time is calculated based on the number of available access channel codes and on the total number of channels.

Independent claims 15 and 16 define the equivalent features in terms of a base station and a user equipment to the corresponding method claim 1.

Therefore, independent claims 1, 15 and 16 meet the requirements of the PCT with respect to novelty and inventive step.

Claims 2-14 add further features to the subject-matter of claim 1 and also meet the requirements of Article 33 PCT with respect to novelty and inventive step.